

**STATEMENT OF MR. JAMES M. BYRNE
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DEPARTMENT OF VETERANS AFFAIRS
BEFORE THE
HOUSE COMMITTEE ON VETERANS' AFFAIRS,
SUBCOMMITTEE ON TECHNOLOGY MODERNIZATION**

NOVEMBER 20, 2019

Madam Chair Lee, Ranking Member Banks, and distinguished Members of the Subcommittee. Thank you for the opportunity to testify today in support of the Department of Veterans Affairs (VA) initiative to modernize its electronic health record (EHR) through the acquisition and deployment of the Cerner Millennium (Cerner) EHR solution. I am accompanied today by Dr. Steve Lieberman, Acting Principal Deputy Undersecretary for Health, Veteran health Administration (VHA); Mr. John Windom, Executive Director, Office of Electronic Health Record Modernization (OEHRM); Dr. Laura Kroupa, Chief Medical, OEHRM; Mr. John Short, Chief Technology and Integration Officer; Mr. Michael Tadych, Director, Puget Sound Veteran Administration Medical Center (Seattle); and Dr. Robert Fischer, Director, Mann-Grandstaff Veteran Administration Medical Center (Spokane).

I want to begin by thanking Congress, and specifically this Subcommittee, for your continued support and shared commitment to the success of the Electronic Health Record Modernization (EHRM) program. Because of your unwavering support, VA is able to continue its mission of improving health care delivery to our Nation's Veterans and those who care for them while being a responsible steward of taxpayer dollars.

Background

On May 17, 2018, VA awarded an Indefinite Delivery/Indefinite Quantity (ID/IQ) EHR contract to Cerner. Given the complexity of this endeavor, VA awarded this ID/IQ to provide maximum flexibility and the necessary structure to control cost. Through this acquisition, VA will adopt the same EHR solution as the Department of Defense (DoD). The solution allows patient data to reside in a single hosting site, using a single

common system and enables the sharing of health information; improves care delivery and coordination; and provides clinicians with data and tools support patient safety. VA believes that implementing this single EHR solution will allow for seamless care for our Nation's Servicemembers and Veterans. Since the last EHRM update on June 12, VA has accomplished several key milestones.

Task Orders

VA has cumulatively awarded twenty Task Orders (TO). VA leverages the ID/IQ contract structure awarding firm-fixed-price TOs as requirements are validated. This strategy affords VA the flexibility to moderate work and modify implementation and deployment plans efficiently. Since June 12, VA has awarded and begun execution on 12 new TOs to include:

- **TO 9 – Registry and Report Development for IOC:** development, testing, and execution in support of registries and reports required for EHRM IOC. More specifically, these tasks include project management, registry development, report development, training, and development of measures.
- **TO 10 – Additional Data Migration Development for IOC:** additional data migration development, testing, and execution in support of data migrations required for EHRM IOC. These tasks include project management and IOC site-specific data migration/ingestion development.
- **TO 11 – Cerner Standalone Scheduling Pilot Site Surveys:** conduct Cerner Scheduling Solution (CSS) site survey (SS) activities for the Chalmers P. Wylie Veterans Outpatient Clinic and the Ohio Veterans Affairs Medical Center and both sites' associated facilities. These deliverables include the Technical Kickoff, Pilot Plan Tailoring, Pilot Site Technical SS, Pilot Functional SS, and Milestone Decision Review.
- **TO 12 – Current State Review (CSR) Waves 1 – 3:** conduct technical and functional CSR activities for sites in Preliminary Waves 1 – 3. These activities will include the Technical Kickoff, Wave Plan Tailoring, Wave Technical CSR, and Wave Functional CSR.

- **TO 13 – Cerner Scheduling Solution (CSS) Project Management, Planning, and Strategy:** provide project management and planning support services for the VA CSS solution. These services include CSS Project Management, CSS Enterprise Management Support, CSS Functional Management Support, and CSS Technical Management Support.
- **TO 14 – Revenue Cycle Workflow Strategy Support Services for IOC:** provide resources to support system and process design to accommodate the unique needs of the Veterans Benefits Administration, the Office of Community Care, the Consolidated Patient Account Centers, and the Veterans Health Administration.
- **TO 16 – EHRM Wave 1 Deployment:** conduct Wave 1 deployment activities for the following VISN 20 Sites and associated facilities: Jonathan M. Wainwright Memorial VA Medical Center (VAMC) and White City VAMC.
- **TO 17 – Data Syndication Development and Execution for IOC:** provide additional data syndication development, testing, execution, and sustainment required for EHRM IOC.
- **TO 18 – Revenue Cycle Development for IOC:** test and deploy additional revenue cycle functionality in support of VA revenue cycle requirements for IOC.
- **TO 19 – Encoder and Clinical Documentation Improvement (CDI) Services for IOC:** develop, test, and deploy encoding and CDI functionality in support of VA EHRM revenue cycle requirements for IOC.
- **TO 20 – Revenue Cycle Managed Services for IOC:** develop, test, and execute managed services in support of VA revenue cycle requirements for IOC.
- **TO 21 – EHRM Wave 2 Deployment:** conduct Wave 2 deployment activities for the following VISN 20 Sites and associated facilities: Portland VAMC, Vancouver VAMC, Roseburg VAMC.

Current State Review

In July 2018, VA and Cerner conducted a Current State Review at VA's IOC sites to gain an understanding of the sites' specific as-is state, and how it aligns with the

Cerner commercial standards to implement the proposed to-be state. The team conducted organizational reviews around people, processes, and technology. They observed and captured current state workflows; identified areas that will affect value achievement and present risk to the project; identified benefits from software being deployed; and identified any scope items that need to be addressed.

VA reviewed final reports analyzing the CSR in October 2018 and discovered there are infrastructure readiness areas that require slightly more investment due to aging infrastructure and areas that will not require as much investment as initially predicted. To date, improved network and system performance by increasing network bandwidth and upgrading aging infrastructure resulting in reduced login times at IOC sites from 30-45 minutes to 15 seconds. VA conducted an analysis of industry and DoD/DHA health IT infrastructure to develop EHRM Requirements and Specifications which will optimize usage of the new EHR solution. As a result of these standards, enhancements were made to the local area network (LAN) and wide area network (WAN) at IOC sites, to minimize potential latency with data transfer from IOC sites to the Cerner Data Center. VA procured approximately 21,700 desktops and laptops of which over 50% are configured and in use by end users.

Organizational Structure and Strategic Alignment with DoD

On June 25, 2018, VA established OEHRM to ensure that we successfully prepare for, deploy, and maintain the new EHR solution and the health information technology (IT) tools dependent upon it. OEHRM reports directly to VA Deputy Secretary and works in close coordination with the Veterans Health Administration and Office of Information Technology.

To ensure appropriate VA and DoD coordination, we emphasize transparency within and across VA through integrated governance and open decision-making. The OEHRM governance structure has been established and is operational, consisting of technical and functional boards that will work to mitigate any potential risks to the EHRM

program. The structure and process of the boards are designed to facilitate efficient and effective decision-making and the adjudication of risks to facilitate rapid implementation of recommended changes. As a result, since the June 12 hearing, the two Departments have supported closure of 20 out of 27 critical VA/DoD joint decisions.

At an inter-agency level, the Departments are committed to instituting an optimal organizational design that prioritizes accountability and effectiveness, while continuing to advance unity, synergy, and efficiencies between VA and DoD. The Departments have instituted an inter-agency working group, facilitated by the Interagency Program Office/the Federal Health Record Modernization (FEHRM) Office, to review use-cases and collaborate on best practices for business, functional, and IT workflows, with an emphasis on ensuring that interoperability objectives are achieved between the two agencies. VA's and DoD's leadership meet regularly to verify the working group's strategy and course correct when necessary. By learning from DoD, VA will be able to address challenges proactively and reduce potential risks at VA's IOC sites. As challenges arise throughout the deployment, VA will mitigate adverse effects to Veterans' health care.

FEHRM

DoD and VA are developing a FEHRM joint governance strategy to further promote rapid and agile decision-making. This structure will maximize DoD and VA resources, minimize EHR deployment and change management risks, and promote interoperability through coordinated clinical and business workflows, data management, and technology solutions while ensuring patient safety. The FEHRM program office will be responsible for effectively adjudicating functional, technical, and programmatic decisions in support of DoD and VA's integrated EHR solutions. DoD and VA will jointly present the final construct of the plan to Congress, including our implementation, phase execution, and leadership plans.

Implementation Planning and Strategy

It will take OEHRM several years to fully implement VA's new EHR solution and the program will continue to evolve as technological advances are made. The new EHR solution will be designed to accommodate various aspects of health care delivery that are unique to Veterans and VA, while bringing industry best practices to improve VA care for Veterans. Most medical centers should not expect immediate major changes to their EHR systems.

VA's approach involves deploying the EHR solution at IOC sites to identify challenges and correct them. With this IOC site approach, VA will hone governance, identify efficient strategies, and reduce risk to the portfolio by solidifying workflows and detecting course correction opportunities prior to the deployment at additional sites. Specifically, At the IOC sites, VA will implement new workflows in discrete capability sets, also known as blocks. This phased implementation plan supports end-user adoption of new functionalities and interoperability between DoD and VA. As mentioned, VA and Cerner have conducted Current-State Reviews for VA's IOC sites. These site assessments included a current-state technical and clinical operations review and the validation of each facility's capabilities list. VA started the go-live clock for the IOC sites, as planned, on October 1, 2018.

Further, VA is continuing to work proactively with DoD and experts from the private sector to reduce potential risks during the deployment of VA's new EHR by leveraging DoD's lessons learned from its IOC sites. Most recently, on May 29, 2019, VA held an Industry Day with over 750 registered industry executives and leaders. OEHRM presented a status update on the program. Cerner and Booz Allen Hamilton joined OEHRM to inform eligible vendors on ways to potentially provide contracting and subcontracting support to the EHRM effort.

VA is leveraging several efficiencies including revised contract language to improve trouble ticket resolution based on DoD challenges; optimal VA EHRM

governance structure; fully resourced program management office with highly qualified clinical and technical oversight expertise; effective change management strategy; and using Cerner Corporation as a developer and integrator consistent with commercial best practices.

During the multi-year transition effort, VA will continue to use Veterans Information System and Technology Architecture (VistA) and related clinical systems until all legacy VA EHR modules are replaced by the Cerner solution. For the purposes of ensuring uninterrupted health care delivery, existing systems will run concurrently with the deployment of Cerner's platform while we transition each facility. During the transition, VA will ensure a seamless transition of care. A continued investment in legacy VA EHR systems will ensure patient safety, security, and a working functional system for all VA health care professionals.

National Workshops

In September 2018, VA held its Model Validation Event, where VA's EHR Council met with Cerner to begin the national and local workflow development process for VA's new EHR solution. There was a series of working sessions designed to examine Cerner's commercial recommended workflows and evaluate the current workflows used at VAMCs. Because of Model Validation, VA planned eight national workshops to educate diverse clinical end-users and validate workflows to ensure VA's new EHR solution meets the Department's needs.

VA completed the eight national workshops that spanned nearly 1,500 sessions and over 50,000 cumulative work hours by over 1,000 frontline clinicians and end users from across the enterprise. VA was supported by DoD, who brought lessons learned and context to the DoD's EHR configuration, and by industry advisors who shared commercial best practices. Through these workshops consensus was reached on over 1,300 design decisions and over 850 workflows were standardized to best meet the needs of our Veterans. VA also held seven of eight local workshops to validate national

design decisions and configure to meet local site requirements. This educated local sites in how their facilities would use the new EHR solution to deliver quality health care to their Veteran population.

Change Management and Workflow Councils

Because the program's success will rely heavily on effective user-adoption, VA is deploying a comprehensive change management strategy to support the transformation to VA's new EHR solution. The strategy includes providing the necessary training to end-users: VAMC leadership, managers, supervisors, and clinicians. In addition, there will be on-going communications regarding deployment schedule and anticipated changes to end-user's day-to-day activities and processes. VA will also continue to work with affected stakeholders to identify and resolve any outstanding employee resistance and any additional reinforcement that is needed.

VA has established 18 EHR Councils (EHRCs) to support the development of national standardized clinical and business workflows for VA's new EHR solution. The Councils represent each of the functional areas of the EHR solution, including behavioral health, pharmacy, ambulatory, dentistry, and business operations. VA understands that to meet the program's goals we must engage frontline staff and clinicians. Therefore, the composition of the EHRCs will continue to be about 60% clinicians from the field who provide care for Veterans, and 40% from VA Central Office. As VA implements its new EHR solution across the enterprise, certain Council memberships will evolve to align with contemporaneous implementation locations. While deploying in a particular VISN, the needs of Veterans and clinicians in that particular VISN will be incorporated into national workflows.

Further, in response to lessons learned from DoD and commercial EHR deployments, VA designed the VA Innovative Technology Advancement Lab (VITAL) to provide advanced, hands-on education for VA informatics and analytics leaders as a lesson learned from DoD. The VITAL program consists of four, three-day, in-person

sessions and a capstone project. The capstone project allows for participants to solve real-world problems, so they gain confidence and competence to take full advantage of the advanced capability in the new EHR solution. These participants are an important component of the super user community as they can support their peers during training, Go-Live, and sustainment activities. Initially 76 trainees were divided across four cohorts to participate from across 40 point-of-care clinical and support functions from VISN 20 sites.

Centralized Scheduling Solution

VA accelerated the timeline to implement a resource-based scheduling solution across the enterprise in advance of the delivery of the full EHR solution. VA currently manages clinical scheduling using the Veterans Health Information Systems and Technology Architecture (VistA). According to a VA study VistA scheduling does not provide VA with the requisite functionality, usability, and overarching business benefits. Additionally, the outdated user interface and cumbersome manual processes create inefficiencies and prevent schedulers from viewing the medical provider's complete picture of available appointments.

As a result, in 2018, VA piloted the Medical Appointment Scheduling System (MASS), a commercial resource-based, scheduling solution in Columbus, Ohio, to replace the clinic-based VistA scheduling system. This pilot site demonstrated that a resource-based solution improved timely access for Veterans, increased provider productivity, and enhanced scheduling accuracy. Further, the resource-based solution:

- Increased visibility of available appointments,
- Allowed providers a comprehensive view of their entire day, and
- Enabled staff to efficiently manage resources needed for appointments.

Because a resource-based solution supports delivering better health care for Veterans, VA will implement the Centralized Scheduling Solution (CSS) to bring these benefits to all Veterans.

VA's EHR modernization contract contains the licenses to implement CSS across the enterprise to fulfill interoperability objectives. Like MASS, CSS is a resource-based scheduling solution and will be implemented in a number of VA facilities in advance of full EHR modernization capabilities. The Chalmers P. Wylie Ambulatory Care Center, in Columbus, Ohio, will serve as the pilot site for CSS, with Go-Live scheduled for April 2020. The Louis Stokes VA Medical Center in Cleveland, Ohio, will serve as the next and larger pilot site for CSS. VA will leverage the architecture and lessons learned from the MASS solution by collaborating with key stakeholders from the MASS implementation to ensure these lessons learned are incorporated in VA's new scheduling initiative.

VA established a dedicated pillar, or division, within OEHRM to provide oversight of CSS integration, deployment, and change management activities. Further, the pillar will collaborate with partners such as the Veterans Health Administration, Office of Information and Technology, and the Veterans Benefits Administration to successfully implement the CSS solution. Accelerating CSS implementation will enable VA to provide a resource-based scheduling solution across the enterprise sooner, and also replace VistA Scheduling Enhancements (VSE), which is the current temporary bridge for scheduling needs.

Funding

With the support of Congress, OEHRM has not experienced funding shortfalls that would impact the success of the EHRM initiative. Additionally, OEHRM appreciates Congress for providing the program with three-year funding. This flexibility in funding execution is critical, as it allows OEHRM to fund key operations on a timeline that aligns with a successful implementation.

OEHRM's enacted fiscal year (FY) 2019 budget has allowed the program to continue the preparation of VA's EHR solution at VA's three IOC sites. VA's FY 2020 budget request of \$1.6 billion would provide the necessary resources for the post Go-

Live activities of the IOC sites, the in-process deployment of seven sites, 18 new site assessments, and 12 site transitions scheduled to begin in FY 2020.

OEHRM reviews its lifecycle cost estimate at least once per month to reflect actual execution and to fulfill its programmatic oversight responsibilities. OEHRM will continue to provide Congress with regular updates to ensure our commitment to transparency.

Conclusion

Again, the EHRM effort will enable VA to provide the high-quality care and benefits that our Nation's Veterans deserve. VA will continue to keep Congress informed of milestones as they occur. Madam Chair, Ranking Member, and Members of the Subcommittee, thank you for the opportunity to testify before the Subcommittee today to discuss one of VA's top priorities. I am happy to respond to any questions that you may have.